



COURSE SYLLABUS

Course:	Electronics I EET K134	Lab, Electronics I EET K135
Location:	Room B229	Room B229
Time:	T 5:00-7:45 pm	T 7:46-9:40 pm
Prerequisites:	EET K105/106, MAT K137	EET K105/106, MAT K137
Co requisites:	EET K135, MAT 186	EET K134, MAT 186
Instructor:	Russell Gibas russell.gibas@snet.net	John Forella forella@earthlink.net
Office Hours:	By appointment	By appointment
Text:	Science of Electronics: Analog Devices, Thomas Floyd	N/A

Course Description: This course is an introduction to the internal physical behavior of solid state electronic devices. Conduction in metals and semiconductors is considered. The characteristics of junction diodes, bipolar transistors, and field effect transistors are studied. Biasing and thermal stabilization requirements and techniques are developed. Models, equivalent circuits, and applications are emphasized.

The laboratory portion supports Electronics I by providing the student with practical experience in the handling and measurement of semi-conductor devices. Computer simulation and bench measurement experiments will be performed in studying the operational characteristics of basic semi-conductor devices.

Course Topics:

PN Junction & Diode Characteristics
Rectifiers, Power Supplies & Regulators
BJT Biasing
BJT Amplifiers
FET Biasing
FET Amplifiers

Lab Topics:

Diode Characteristics
Diode Applications
BJT Biasing
BJT Applications
FET Biasing
FET Amplifiers

Course Format: This course will be a combination of lecture and lab exercises. All classes are held in the lab for easy transition from lecture topics to hands-on demonstration of theoretical principles.

Grading: Homework, Lab Exercises and Reports. Tests, Oral Presentations, Class Participation, Attendance, Promptness, Professional Attitude.

Attendance/Timeliness: Attendance is mandatory at all class and lab sessions. Tardiness of attendance and/or assignments can have a significant negative impact on grading.



K134/135 Course Outcomes: The Course Outcomes are defined and assessed to determine the effectiveness of the course at meeting the course objectives.

1. Mastery of electrical technology concepts as defined in this syllabus.
2. Knowledge of advanced electrical quantities, units and relationships.
3. Demonstrate an ability to build and test advanced electrical circuits and systems.
4. Demonstrate an ability to analyze and solve problems relating to advanced electrical systems.
5. Demonstrate oral and written communications skills.
6. Demonstrate an ability to engage in self-directed professional development.
7. Demonstrate proper professional and ethical behavior.
8. Demonstrate a commitment to quality, timeliness and continuous improvement

College Withdrawal Policy

Students may withdraw, in writing or verbally at the Registrar's Office for any reason until the end of the 10th week of classes. From the 11th week through the end of the 13th week, a student may withdraw with the instructor's written approval.

Disabilities Statement

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact the Disabilities Counseling Services at 383-5240. To avoid any delay in the receipt of accommodations, you should contact the counselor as soon as possible. Please note that I cannot provide accommodations based upon disability until I have received an accommodation letter from the Disabilities Counselor.